

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

1. (Currently Amended) A method of forming a ZnO nanorod array, which comprises:
  - coating on a substrate ZnO nanoparticles serving both as a buffer layer and a seed layer; and
  - growing the ZnO nanoparticles into crystals to form the ZnO nanorod array in a nutrient solution containing nutrients consisting essentially of hexamethylenetetramine and at least one nutrient selected from the group consisting of Zn nitrate, Zn acetate, or and a derivative thereof,
  - wherein the substrate consists essentially of Si-wafer or is made of  $\text{Al}_2\text{O}_3$ , GaN,  $\text{ScAlMgO}_4$ , or  $\text{LiNbO}_3$ , and
  - wherein the operation of growing the ZnO nanoparticles in the nutrient solution is performed at 90 to 100 °C.
2. (Currently Amended) A method of forming a ZnO nanowall array, which comprises:
  - coating on a substrate ZnO nanoparticles serving both as a buffer layer and a seed layer; and
  - growing the ZnO nanoparticles into crystals to form the ZnO nanowall array in a nutrient solution containing nutrients consisting essentially of sodium citrate and at least one nutrient selected from the group consisting of Zn acetate or and its derivative and sodium citrate,
  - wherein the substrate consists essentially of Si-wafer or is made of  $\text{Al}_2\text{O}_3$ , GaN,  $\text{ScAlMgO}_4$ , or  $\text{LiNbO}_3$ , and
  - wherein the operation of growing the ZnO nanoparticles in the nutrient solution is performed at 90 to 100°C.
3. (Cancelled)

4. (Currently Amended) The method of claim 1, wherein ~~the~~ a volume ratio of Zn nitrate, Zn acetate, or a derivative thereof, to hexamethylenetetramine in the nutrient solution is 10:1 to 1:10.

5. (Currently Amended) The method of claim 2, wherein ~~the~~ a volume ratio of Zn acetate or its derivative to sodium citrate in the nutrient solution is 10:1 to 1:10.

6. (Original) A ZnO nanorod array formed by the method of claim 1.

7. (Original) A ZnO nanowall array formed by the method of claim 2.

8. (Cancelled)

9. (Cancelled)

10. (Currently Amended) The method of claim 1, wherein the nutrients of the nutrient solution ~~contains~~ are hexamethylenetetramine and Zn nitrate.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The method of claim 2, wherein the nutrients of the nutrient solution ~~contains~~ are Zn acetate and sodium citrate.